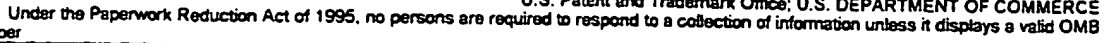
Sheet 1 of 1

Form PTO-1449 US Dept. of Commerce (REV. 8-83) PATENT & TRADEMARK OFFICE  INFORMATION DISCLOSURE STATEMENT  (Use several sheets if necessary)		ATTY DOCKET NO.  60012US (2775-001CIP3)		APPLICATION NO.  09/844,626			
		APPLICANT Elwin M. BEATY <i>et al.</i>					
		FILING DATE April 27, 2001		GROUP 2625			
U.S. PATENT DOCUMENTS							
EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUB CLASS	FILING DATE IF APPROPRIATE
SCE	A	US 5245671	Sept. 1993	Kobayashi <i>et al.</i>	382	150	
FOREIGN PATENT DOCUMENTS							
							TRANSLATION
							YES NO
OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, etc.)							
SCE	B	John Lau, BALL GRID ARRAY TECHNOLOGY, pp. 558, 561, 565, 591 (1995 McGraw-Hill)					
EXAMINER Sheela Chouan					DATE CONSIDERED 1/4/05		
Examiner: Initial if citation considered, whether or not citation is in conformance with M.P.E.P. 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.							



**Complete if Known**

<b>Application Number</b>	09/844626
<b>Filing Date</b>	4/27/2001
<b>First Named Inventor</b>	BEATY et al
<b>Art Unit</b>	2877
<b>Examiner Name</b>	
<b>Attorney Docket Number</b>	60012US

Sheet	1	of	1
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[illegible][illegible]

Examiner Signature	Sheela Chennan	Date Considered	1/4/05
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				Application Number	09/844626
				Filing Date	4/27/2001
				First Named Inventor	BEATY et al.
				Art Unit	2877
				Examiner Name	
Sheet	1	of	5	Attorney Docket Number	60012US

U.S. PATENT DOCUMENTS					
Examiner Initials*	Cite No. <sup>1</sup>	Document Number	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number - Kind Code <sup>2</sup> (if known)			
SCC		US-5,039,868	08/13/1991	Kobayashi	FIG. 4, Col. 7, L. 12 etc.
		US-5,455,870	10/03/1995	Sepai	FIG. 1, Col. 6, L. 12 etc.
		US-5,574,801	11/12/1996	Collet-Beillon	FIGS. 4, 8, 9 Col. 7, L. 35
		US-6,005,965	12/21/1999	Tsuda et al.	FIGS. 1-8, Col. 1
		US-5,828,449	10/27/1998	King	FIG. 1
		US-1,894,025	01/10/1933	Dennison et al.	
		US-3,895,446	07/22/1975	Orlov et al.	
		US-4,084,875	04/18/1978	Yamamoto	
		US-4,213,146	07/15/1980	Maiman	
		US-4,463,310	07/31/1984	Whitley	
		US-4,521,807	06/04/1985	Werson	
		US-4,603,487	08/05/1986	Matsunata	
		US-4,638,471	01/20/1987	van Rosmalen	
		US-4,677,473	06/30/1987	Okamoto	
		US-4,714,830	12/22/1987	Usui	
		US-4,731,855	03/15/1988	Suda et al.	
		US-4,774,768	10/04/1988	Chiponis	
		US-4,776,102	10/11/1988	Carroll	
		US-4,776,103	10/11/1988	Cote	
		US-4,821,157	04/11/1989	Birk et al.	
		US-4,825,394	04/25/1989	Beamish et al.	

FOREIGN PATENT DOCUMENTS						
Examiner Initials*	Cite No.	Foreign Patent Document	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T <sup>6</sup>
		Country Code <sup>3</sup> - Number <sup>4</sup> - Kind Code <sup>5</sup> (if known)				
SCC		WO9112489	08/22/1991	ABOS AUTOMATION		
		WO9207250	04/30/1992	ABOS AUTOMATION		
		WO97/44634	11/27/1997	KOMATSU LTD.		X
		JP9304030(ABSTRACT)	11/28/1997	KOMATSU LTD.		X
Examiner Signature	Sheela Chawan			Date Considered	1/4/05	

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				Application Number	09/844626
				Filing Date	4/27/2001
				First Named Inventor	BEATY et al.
				Art Unit	2877
Examiner Name					
Attorney Docket Number	60012US				
Sheet	2	of	5		

U.S. PATENT DOCUMENTS					
Examiner Initials*	Cite No. <sup>1</sup>	Document Number	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number - Kind Code <sup>2</sup> (if known)			
SCC		US-4,849,743	07/18/1989	Ohno	RECEIVED  JUN 17 2003  Technology Center 2600
		US-4,886,958	12/12/1989	Merryman et al.	
		US-4,943,722	07/24/1990	Breton et al.	
		US-4,973,948	11/27/1990	Roberts	
		US-5,032,924	07/16/1991	Brown et al.	
		US-5,048,904	09/17/1991	Montagu	
		US-5,058,178	10/15/1991	Ray	
		US-5,095,447	03/10/1992	Manns et al.	
		US-5,113,581	05/19/1992	Hidese	
		US-5,114,229	05/19/1992	Hideshima	
		US-5,133,601	07/28/1992	Cohen et al.	
		US-5,140,643	08/18/1992	Izumi et al.	
		US-5,163,232	11/17/1992	Gonzales, Jr. et al.	
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		US-5,204,734	04/20/1993	Cohen et al.	
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		US-5,307,149	04/26/1994	Palm et al.	
		US-5,355,221	10/11/1994	Cohen et al.	

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FOREIGN PATENT DOCUMENTS							
Examiner Initials*	Cite No. <sup>1</sup>	Foreign Patent Document		Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	†
		Country Code <sup>3</sup> - Number <sup>4</sup> - Kind Code <sup>5</sup> (if known)					
SCC    ✓		JP10104033(ABSTRACT)		04/24/1998	KOMATSU LTD.		X
		JP10221066(ABSTRACT)		08/21/1998	KOMATSU LTD.		X
		JP10227623(ABSTRACT)		08/25/1998	KOMATSU LTD.		X
		JP10232114		09/02/1998	KOMATSU LTD.		
		JP10267621(ABSTRACT)		10/09/1998	KOMATSU LTD.		X

Examiner Signature	Sheela Chavan	Date Considered	11/4/05
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Substitute for form 1449B/PTO		Complete if Known			
		Application Number	09/844626		
INFORMATION DISCLOSURE STATEMENT BY APPLICANT (use as many sheets as necessary)		Filing Date	4/27/2001		
		First Named Inventor	BEATY et al.		
		Group Art Unit	2877		
		Examiner Name			
Sheet	5	of	5	Attorney Docket Number	60012US

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OTHER PRIOR ART - NON PATENT LITERATURE DOCUMENTS			
Examine r Initials*	Cite No.	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T <sup>2</sup>
SCC		BALLARD, BROWN, "Range Information From Geometry," <i>Computer Vision</i> , p.88-89, unknown date.	
		ICOS VISION SYSTEMS, NV, Brochure, undated, "BGA 2D Inspection System."	
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		GONZALEZ, WOODS, "Stereo Imaging," <i>Digital Image Processing</i> , pp. 68-72, circa 1992.	
		SCHURR, "Basics of Stereoscopic Machine Vision for 3D Gauging," <i>International Robots &amp; Vision Automation Conference</i> , April 4-8, 1993, PP. 16/37-46.	
		HANDLICK(SP?), SHAPIRO, "Stereo," <i>Computer Robot</i> , pp. 156-159, circa 1993.	
		SMETS ET AL., "System for 2D and 3D Inspection of BGA'S Using Vision," <i>BGA Packaging and Assembly conference</i> , pp. 1-8, January 16-17, 1995.	
		CARACAPPA, "On improving BGA Reliability," <i>SMT</i> , pp.44-46, June, 1997.	
		KOMATSU, "CSP Inspection Machine," undated brochure available at Japan Semicon Conference in December 1997.	
		ICOS VISION SYSTEMS, NV, Brochure, undated, "BGA 3D Inspection System," available at least as early as 1997.	
SCC		ICOS VISION SYSTEMS, NV, Brochure, undated, "CI-8250 The Complete High-Speed Inspection System."	

Examiner Signature	Sheela Chavan	Date Considered	1/4/05
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